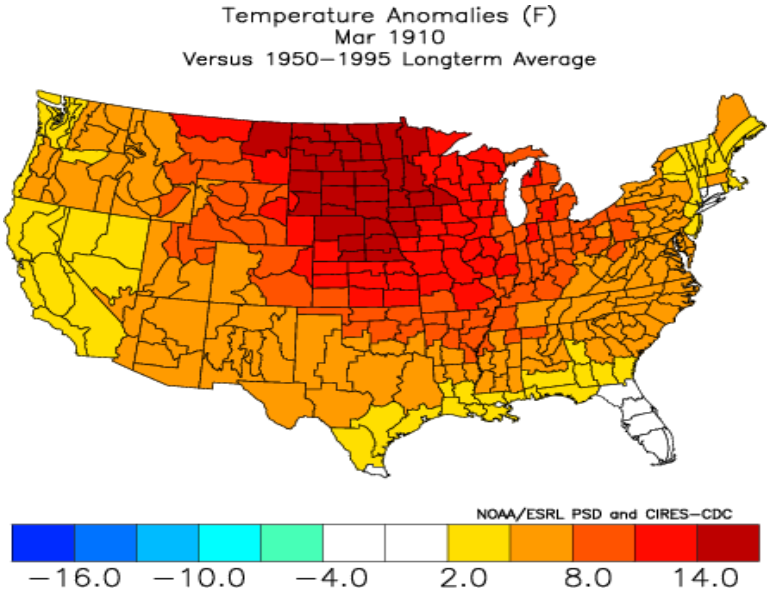
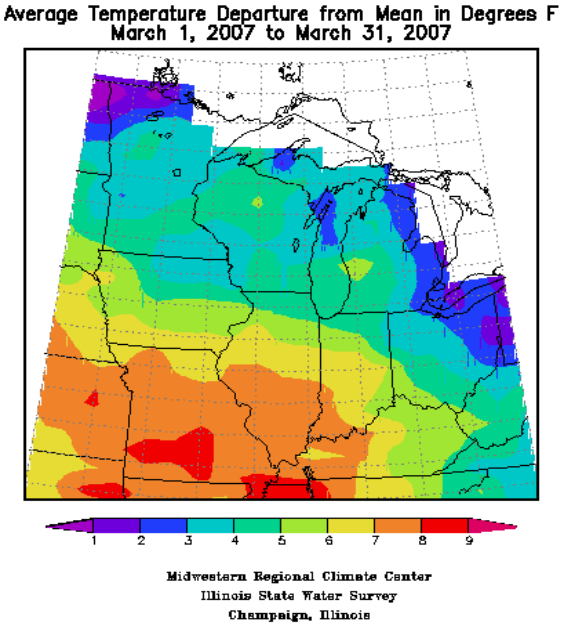
RECAPPING MARCH & LOOKING AHEAD VIA CLIMATE

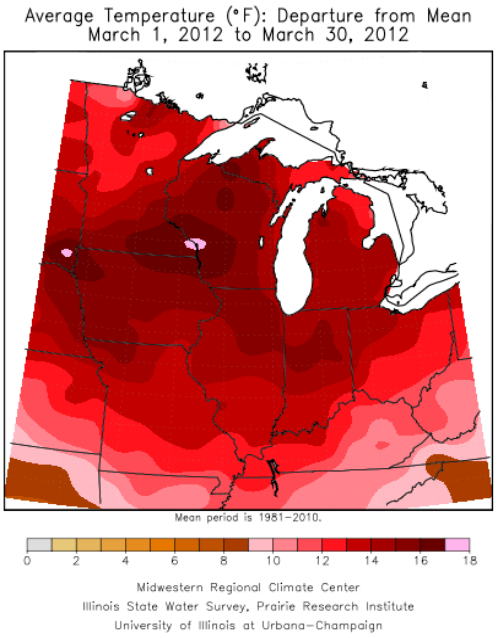
The winter of 2011-12 has been anomalously warm by any standard with the CONUS recording the 4th warmest winter on record. This spring has continued that trend with a March that will very likely exceed the heat of 1910, a year that has held many temperature records for over a century. If we compare this March of 2012 to that of 1910, for Springfield and Joplin, 1910 represents the warmest March currently on record. After temperatures in the 80s for the final two days of the month, March 2012 beat 1910 by 0.5 degrees, with the monthly average temperature for March for Springfield at 58.1





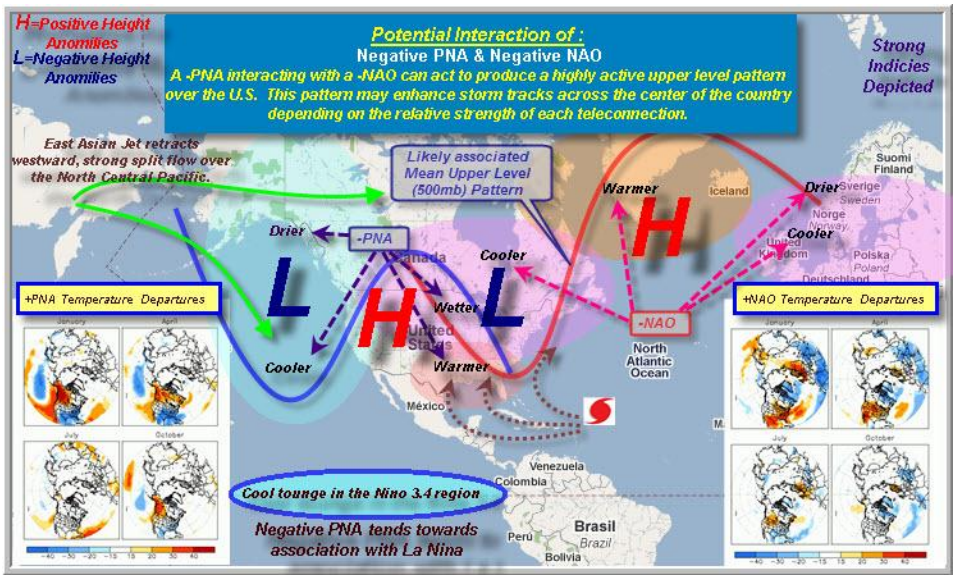
degrees through March 31st. While Joplin did not reach the 1910 mark of 62.4 degrees for the average monthly temperature for March, Joplin did reach 60.0 for the month through the 31st. This does move Joplin into 2nd, beating 1907 at 59.5 degrees. This makes March 2012 the Record warmest month for SGF, VIH, UNO and the second warmest for JLN.

SGF Avg March Temps vs Normal	Occurrence date	JLN Avg March Temps vs Normal	Occurrence date
69.9 *F	46.2 *F	71.4 *F	48.7 *F
Apr. 24th	Apr. 20th	Apr. 17th	Apr. 19th

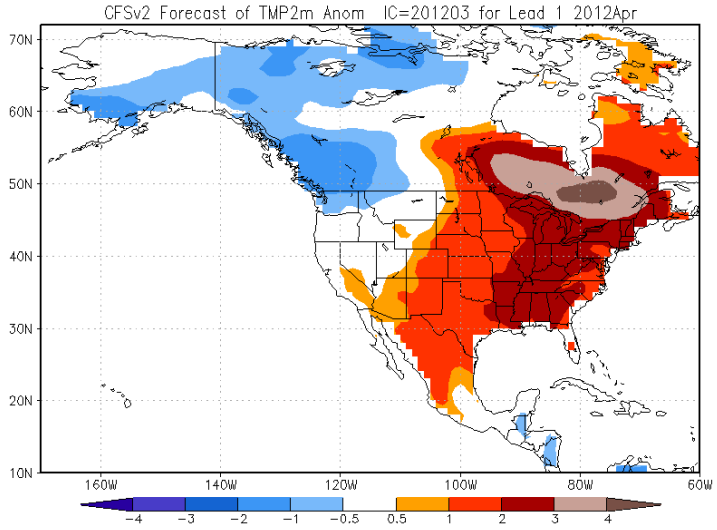


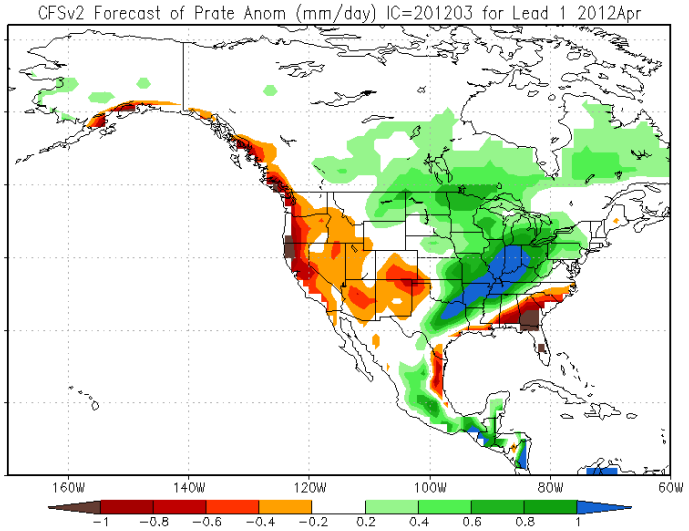
There is a very good correlation right now when comparing March 1910 (Above) to March 2012 (Lower Right). The warmest temperatures have occurred over the Northern Plains, Great Lakes and south into the Ozarks. While 2007 set records across the region (Upper Right) the conditions that year, when the warm March was followed by a period of freezing temperatures, have some significant differences. In 2007, the Northern Plains and Great Lakes still had snow cover. As a result of this the

potential for an unmodified cold Canadian air mass to make its way in the Ozarks and points south was much greater. With no snow pack noted across the discussed region or even into central portions of Canada, the potential of seeing an outbreak of cold air similar to 2007 is becoming minimal at best.

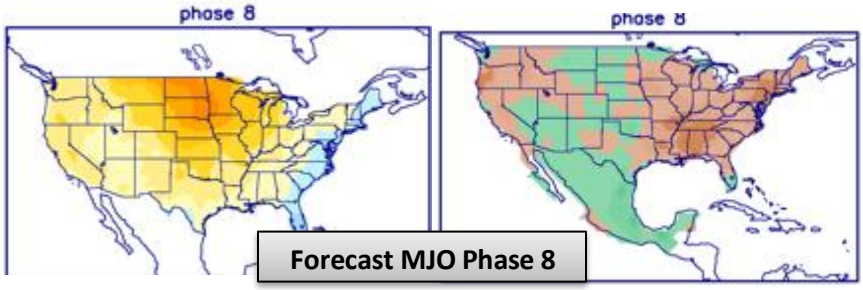


Looking ahead to April, the Climate Forecast System version 2 model (Below Left) is indicating the potential for above average temperatures to continue over the eastern 2/3rds of the country. This would correspond well to the current teleconnection forecasts which indicate a shift towards a –PNA/-NAO pattern for the first half of April (Top Right). There are also some indications





looking at the forecast teleconnection pattern and the CFSv2 Precipitation forecasts (Middle Right) for a potentially active weather pattern, potentially dominated by southwesterly flow aloft. The temperatures would also likely be impacted and enhanced by the ongoing MJO which, in Phase 7/8, would act to enhance the warmer temperatures (Above Left) for the eastern half of the country. While the forecasts MJO would potentially temper some of the precipitation expectations (Above Right), a more active SW flow pattern could be able to overcome the MJO's effects.

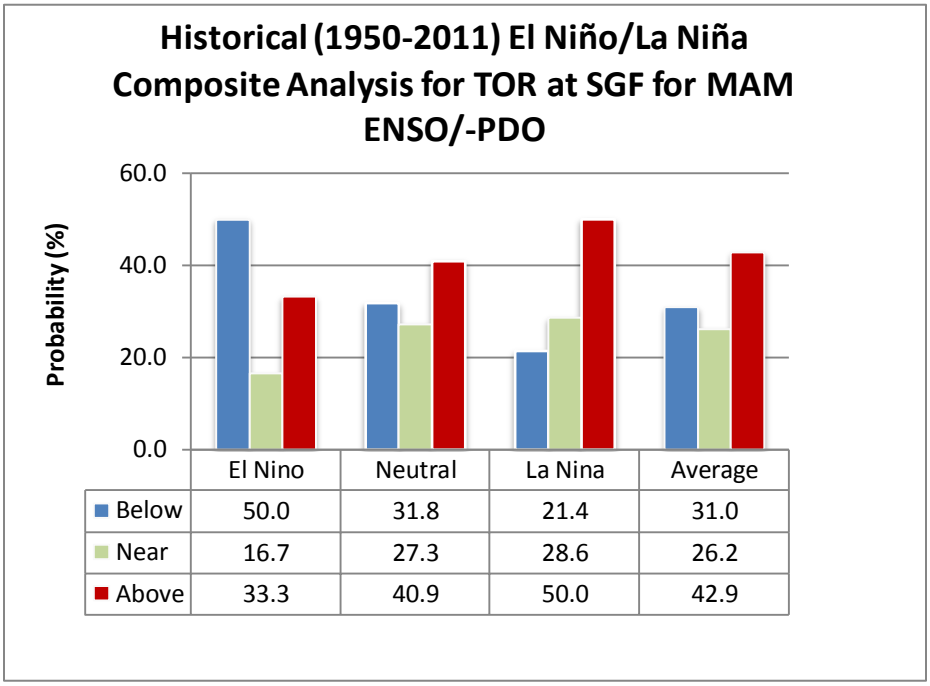


Forecast MJO Phase 8

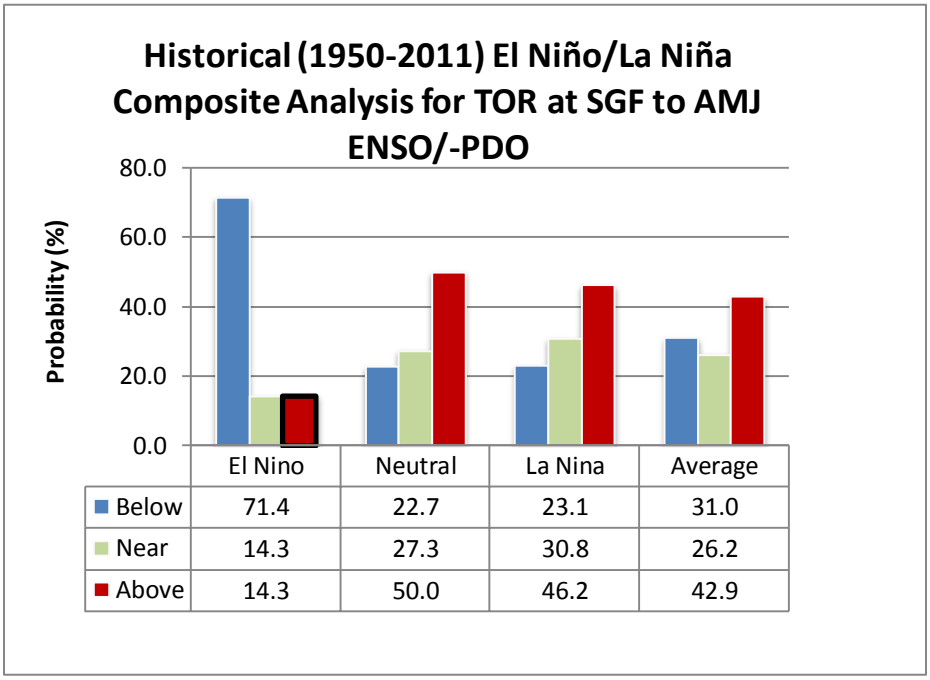
Looking at the Ozarks:

Looking at Historical Composites for Springfield for the MAM and AMJ (March-April-May & April-May-Jun) periods based on ENSO cycle and also by PDO, there is additional support for an active period of weather with limited chances for a cold outbreak. The MAM and AMJ periods show a shift towards enhanced chances for increased tornadic activity during La Nina and ENSO Neutral years. While the current ENSO forecast is for the April to May period to be a transition period from La Nina to Neutral, it would be reasonable to expect that either of the outcomes or an average of the two would provide some insight to the potential expectation of the rest of spring.

The indications for Warm and wet remain as well, though climatologically the odds for the 1950 to 2011 period lean in favor of cooler and drier under La Nina and Neutral ENSO conditions.



	El Nino	Neutral	La Nina	Average
Below	50.0	31.8	21.4	31.0
Near	16.7	27.3	28.6	26.2
Above	33.3	40.9	50.0	42.9



	El Nino	Neutral	La Nina	Average
Below	71.4	22.7	23.1	31.0
Near	14.3	27.3	30.8	26.2
Above	14.3	50.0	46.2	42.9

Information compiled by Gene Hatch, Meteorologist & Climate Focal Point, WFO Springfield MO.